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<b>(21) International Application Number:</b> PCT/US95/16155 <b>(22) International Filing Date:</b> 8 December 1995 (08.12.95)  <b>(30) Priority Data:</b> 08/353,018                      9 December 1994 (09.12.94)      US  <b>(71) Applicants:</b> THE REGENTS OF THE UNIVERSITY OF CALIFORNIA [US/US]; 22nd floor, 300 Lakeside Drive, Oakland, CA 94612 (US). THE MEDICAL RESEARCH COUNCIL [GB/GB]; Hills Road, Cambridge CB2 2QH (GB).  <b>(72) Inventors:</b> PINKEL, Daniel; 31 Manzanita Court, Walnut Creek, CA 94595 (US). GRAY, Joe, W.; 50 Santa Paula Avenue, San Francisco, CA 94127 (US). ALBERTSON, Donna; 42 Glisson Road, Cambridge CB1 2HF (GB).  <b>(74) Agents:</b> BASTIAN, Kevin, L. et al.; Townsend and Townsend and Crew, Steuart Street Tower, One Market, San Francisco, CA 94105-1492 (US).	<b>(81) Designated States:</b> CA, JP, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).  <b>Published</b> <i>With international search report.</i>	
<b>(54) Title:</b> COMPARATIVE FLUORESCENCE HYBRIDIZATION TO NUCLEIC ACID ARRAYS  <b>(57) Abstract</b> <p>The present invention provides methods of determining relative copy number of target nucleic acids and precise mapping of chromosomal abnormalities associated with disease. The methods of the invention use target nucleic acids immobilized on a solid surface, to which a sample comprising two sets of differentially labeled nucleic acids are hybridized. The hybridization of the labeled nucleic acids to the solid surface is then detected using standard techniques.</p>		